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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,805	04/08/2002	Ravinder K. Jain	44838	1656
23529	7590	09/12/2005	EXAMINER	
ADE & COMPANY 1700-360 MAIN STREET WINNIPEG, MB R3C3Z3 CANADA			MCELWAIN, ELIZABETH F	
			ART UNIT	PAPER NUMBER
			1638	

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/926,805

Applicant(s)

JAIN ET AL.

Examiner

Elizabeth F. McElwain

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 26, 27, 29-31, 34-36, 38, 40-42 and 44-51 is/are pending in the application.
- 4a) Of the above claim(s) 6-11, 13-16, 18-20, 26, 27, 29-31, 34-36, 38 and 40-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 12, 17, and 44-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Notice of Non-Responsive Amendment mailed June 7, 2005 is withdrawn.

A Final Rejection in response to the amendment filed February 18, 2005 is set forth below.

Election/Restrictions

This application contains claims 6-11, 13-16, 18-20, 26, 27, 29-31, 34-36, 38, 40-42 and 48-51 which are non-elected with traverse. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01. It is noted that Applicant further traverses the restriction. However, the restriction requirement was made final in the last office action.

The amendment filed February 18, 2005 has been entered.

Claims 1 and 17 are currently amended.

Claims 21-25, 28, 32, 33, 37, 39, 43 are cancelled.

Claims 44-51 are newly submitted. However, claims 48-51 are drawn to non-elected sequences and are withdrawn from consideration.

Claims 1-20, 26, 27, 29-31, 34-36, 38, 40-42 and 44-51 are pending.

Claims 1-5, 12, 17 and 44-47 are drawn to the elected invention and are examined on the merits.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 1, and claims 2-5, 12, 17 and 44-47 dependent thereon, are rejected under 35

U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recitation of “harvesting the triglycerides from the organism” is not supported by the specification as originally filed.

Applicant points to page 10, lines 5-15 as providing support. However, the specification states that seeds are harvested and then triglycerides are extracted from the seeds. The specification does not provide support for harvesting triglycerides from the organism.

3. Claim 45 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claim now recites that the organism has higher triglyceride content compared to a control organism. However, there is no support in the specification for the term “control” with regard to organism. The term could not be found in Tables 1-6 pointed to by applicant.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishizawa.

Nishizawa (column 11-13) teaches transforming a plant with a DNA encoding a protein having GPAT activity and having at least 70% identity to SEQ ID NO: 7 and expressing the activity in the plant, wherein an increase in triacylglyceride content would be inherent in the same process. Nishizawa et al also teach extraction of total lipids from the transgenic plant, which inherently would comprise triacylglycerides (columns 13-14).

3. Applicants' arguments filed February 18, 2005 have been fully considered but they are not persuasive. Applicants' assert that Nishizawa does not teach a method of producing triacylglycerides by expression of GPAT in an organism and recovering triglycerides. The Examiner maintains that the claims are anticipated by Nishizawa, given that Nishizawa teach the same method steps, including lipid extraction, which would inherently extract triglycerides from the organism.

Claim Rejections - 35 USC § 103

4. Claims 1-5, 12, 17 and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishizawa, and further in view of Davies et al (U.S. Patent 5,563,058) and Bhella et al (Plant Physiol. 106:1713-1714,1994 in IDS), as stated in the last office action. In addition, Nishizawa teaches extraction of total lipids from the transgenic plant, which inherently would comprise triacylglycerides (columns 13-14).

Applicants' arguments filed February 18, 2005 have been fully considered but they are not persuasive. Applicants assert that the intent of the overexpression of GPAT in the

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references was to change membrane composition, while applicants invention is drawn to increasing overall triacylglyceride content of an organism and then harvesting the triacylglycerides from the organism. The Examiner maintains that Applicants' claims recite the same method steps as those taught in the prior art. In addition, Applicants are arguing limitations that are not in the claims in that the claims no longer recite that there is an increase of TAG in the transformed organism, with the exception of claim 45, for which it is unclear what would be considered the control organism.

Applicants further argue that the prior art suggests that other enzymes were more likely targets for increasing TAG production. The Examiner maintains that at page 1, lines 21-22 of the specification it teaches that it was known that GPAT catalyzes the first reaction in TAG synthesis, and therefore it would have been obvious to increase expression of GPAT in order to increase TAG synthesis. Furthermore, the evidence for non-obviousness should be commensurate with the scope of the claims.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth F. McElwain whose telephone number is (571) 272-0802. The examiner can normally be reached on increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones can be reached on (571) 272-0745. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Elizabeth F. McElwain, Ph.D.
Primary Examiner
Art Unit 1638

EFM